

Docket No. 020630

Serial No. 10/648,623

AMENDMENTS TO THE CLAIMS:

1. (currently amended) A location services apparatus for providing location services to a mobile station, comprising:
  - a) a CPU;
  - b) a memory coupled to the CPU, wherein the memory stores data ~~pertaining to~~ comprising location services equipment identity information and a plurality of location services equipment identifiers; and
  - c) an equipment identity processor coupled to the CPU and to the memory, wherein the equipment identity processor is configured to receive a location services equipment identifier[[s]] of the plurality and to retrieve information comprising a location services equipment identity ~~information~~ corresponding to the identifier, and wherein the equipment identity processor selectively generates location services control signals that control operation of the CPU responsive to an identified characteristic of the location services equipment identity.
2. (currently amended) The location services apparatus of Claim 1 wherein the location services equipment identity information and the plurality of location services equipment identifiers are associated with and correspond to a mobile station.
3. (original) The location services apparatus of Claim 2, further comprising an equipment identity server, wherein the equipment identity server is configured to provide the characteristic of the mobile station to the equipment identity processor.
4. (original) The location services apparatus of Claim 2 wherein the characteristic includes a manufacturer identifier of the mobile station.
5. (original) The location services apparatus of Claim 2 wherein the characteristic includes a model identifier of the mobile station.
6. (original) The location services apparatus of Claim 2 wherein the characteristic includes an error code associated with the mobile station.
7. (original) The location services apparatus of Claim 6 wherein the location services control signals compensate for an error associated with the error code.

Docket No. 020630

Serial No. 10/648,623

8. (original) The location services apparatus of Claim 2 wherein the location services control signals cause the CPU to store information in the memory.

9. (currently amended) A communication system for providing location services to a mobile station, the system comprising:

- a) a base station system; and
- b) a location server coupled with the base station system, wherein the location server is configured to selectively generate location services control signals to control operation of the system in response to ~~[[a]]~~ an equipment characteristic of the mobile station to which location services are to be provided.

10. (currently amended) A method of providing location services to a mobile station, the method comprising the steps of:

- a) receiving a request for location services to be provided to the mobile station;
- b) identifying ~~a location services~~ an equipment characteristic of the mobile station in response to the request, wherein the ~~location services~~ equipment characteristic comprises one or more of the following characteristics: a manufacturer, a model, a bug, an error code; and
- c) selectively generating location services control signals based at least in part on the ~~location services~~ equipment characteristic identified in step b).

11. (original) The method of Claim 10, further comprising the step of storing data based at least in part on the location services characteristic of the mobile station.

12. (original) The method of Claim 10 wherein the location services control signals compensate for an error associated with the bug.

13. (original) The method of Claim 10 wherein the location services control signals compensate for an error associated with the error code.

14. (currently amended) A communication system comprising:

- a) a means for providing location services to a mobile station; and
- b) a means for controlling the means for providing location services based at least in part on an identified ~~location services~~ equipment characteristic of the mobile station.

Docket No. 020630

Serial No. 10/648,623

15. (original) The communication system of Claim 14, further comprising a means for identifying a mobile station to which location services are to be provided.

16. (currently amended) The communication system of Claim 14, further comprising a means for storing data based at least in part on the identified ~~location services~~ equipment characteristic of the mobile station.

17. (original) A method of operating a location server, comprising the steps of:

- a) receiving a request for location services associated with a mobile station;
- b) identifying a mobile station type of the associated mobile station; and
- c) storing at least one parameter based on the identified mobile station type.

18. (original) The method of Claim 17 wherein receiving a request for location services associated with a mobile station includes receiving a mobile station type identifier.

19. (original) The method of Claim 17 wherein receiving a request for location services associated with a mobile station includes receiving a mobile station manufacturer identifier and a mobile station model identifier as part of the request for location services.

20. (original) The method of Claim 17 wherein receiving a request for location services associated with a mobile station includes receiving a mobile station user identifier.

21. (original) The method of Claim 20, wherein the mobile station user identifier may include an international mobile subscriber identity or an electronic serial number.

22. (original) The method of Claim 17 wherein identifying a mobile station type of the associated mobile station includes identifying the associated mobile station by manufacturer and model.

23. (original) The method of Claim 17, further comprising the step of determining a performance parameter related to the request for location services.

24. (original) A method of operating a mobile switching center, comprising the steps of:

- a) receiving a request for location services associated with a mobile station;

**Docket No. 020630****Serial No. 10/648,623**

- b) identifying a mobile station type of the associated mobile station; and
  - c) communicating the request for location services and the mobile station type to a location server.
25. (original) The method of Claim 24, further comprising the steps of:
- a) receiving a unique mobile equipment identifier from the mobile switching center; and
  - b) querying a database for the mobile station type with the unique mobile equipment identifier.
26. (original) The method of Claim 24, further comprising the steps of:
- a) receiving a mobile station user identifier from the mobile switching center; and
  - b) querying a database for the mobile station type corresponding to and associated with the mobile station user identifier.
27. (original) The method of Claim 26, wherein the mobile station user identifier may include an international mobile subscriber identity or an electronic serial number
28. (original) The method of Claim 24, further comprising the steps of:
- a) receiving an international mobile equipment identifier from the mobile switching center; and
  - b) querying an equipment identification server for a manufacturer identifier and model identifier based on the received international mobile equipment identifier.
29. (original) The method of Claim 24, wherein receiving a request for location services associated with a requesting mobile station includes receiving a unique mobile equipment identifier as part of the request for location services.
30. (original) The method of Claim 29, wherein the unique mobile equipment identifier may be received as an element in the standard location request message.
31. (original) The method of Claim 29, wherein the unique mobile equipment identifier may be transmitted as an element in a proprietary message between the mobile switching center and the location server.
32. (original) A method of operating a location server, comprising:

Docket No. 020630

Serial No. 10/648,623

- a) receiving a request for location services associated with a mobile station;
- b) identifying a mobile station type of the associated mobile station;
- c) determining whether an error related to the request for location services has occurred; and
- d) storing and retrieving data relating to errors based on the identified mobile station type.

33. (original) A method of operating a location server, comprising:

- a) receiving a request for location services associated with a mobile station;
- b) identifying a mobile station type of the associated mobile station; and
- c) storing and retrieving data associated with and corresponding to a performance parameter of the associated mobile station based on the identified mobile station type.

34. (original) The method of Claim 33, further comprising the step of providing location services using location services control signals based at least in part on the performance parameter.

35. (original) The method of Claim 34, wherein the step of providing location services includes using location services control signals based at least in part on performance parameter information relating to one or more of the following: additional information associated with and corresponding to the mobile station type, preferred operating parameters associated with the mobile station type.

36. (original) A method of operating a location server, comprising:

- a) receiving a plurality of requests for location services associated with a plurality of requesting mobile stations;
- b) for at least some of the received requests, identifying a mobile station type of the associated mobile station;
- c) identifying errors related to at least some of the received requests for location services; and
- d) maintaining a database of corrective actions based at least in part on the identified errors and the identified mobile station type.

37. (original) A method of operating a location server, comprising:

**Docket No. 020630****Serial No. 10/648,623**

- a) receiving a plurality of requests for location services associated with a plurality of requesting mobile stations;
  - b) for at least some of the requests for location services, identifying a mobile station type;
  - c) for at least some of the requests for location services, determining a performance parameter related to the fulfillment of the request for location services; and
  - d) storing and retrieving data associated with and corresponding to the determined performance parameter based on the identified mobile station type.
38. (original) A method of operating a communication system, comprising:
- a) communicating with a plurality of mobile stations;
  - b) for at least some of the mobile stations, determining a corresponding mobile station type;
  - c) for at least some of the corresponding mobile station types, initiating a request for location services for the corresponding mobile stations; and
  - d) storing and retrieving data relating to a location services performance parameter based on at least one of the corresponding mobile station types.
39. (original) The method of Claim 38, further comprising:
- a) receiving requests for location services from a plurality of mobile stations;
  - and
  - b) providing the requested location services.
- 40 - 66. (withdrawn)